
United States Circuit Court of Appeals

FOR THE NINTH CIRCUIT.

HEATH UNIT TILE COMPANY, a Corporation,
Appellant,

vs.

THE AMERICAN FIRE BRICK COMPANY, a Corporation, and
THE RICHEY-GILBERT COMPANY, a Corporation,
Appellees.

BRIEF FOR APPELLANT.

BATES & MACKLIN,
Solicitors and
Counsel for Plaintiff.

JOHN H. MILLER,
JUSTIN W. MACKLIN,
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BRIEF FOR APPELLANT.

This is a suit under patent No. 1,215,149 granted February 6, 1917 to Frederick Heath for a **HOLLOW WALL CONSTRUCTION** and assigned directly to the plaintiff company. Certified copies of the patent, the articles of incorporation of the company, and the assignment appear in the record as exhibits.

The invention covered by the patent in suit is a hollow wall construction believed to be well defined by claim 2 of the patent.

2. A building wall composed of horizontal courses each formed of blocks having a single void, and other blocks having three voids arranged parallel longitudinally, the blocks being laid adjacently and alternating with each other, the central void of the three void block being in direct vertical alignment with the space between the blocks in adjacent courses, as described.

The defendants admit infringement of the Patent, making their sole defense one of validity. The precise

thing of the patent is admitted by counsel and the President of the defendant company to have been made since the cancellation of a license contract under which the defendant, The American Fire Brick Company, formerly operated. (Rec. Page 28).

The Richy-Gilbert Company has been brought in merely for the purpose of showing a completed wall structure made of blocks furnished by The American Fire Brick Company with the intention that they should be used in such an infringing structure.

The plaintiff seeks only to enjoin further manufacture of tiles for walls in infringing structures by the defendant The American Fire Brick Company, except by the consent of the owner of the patent in suit.

SOLE QUESTION IN THIS SUIT.

Is the Heath Wall a patentable invention or did it involve mere mechanical skill?

The Court of Appeals of the District of Columbia held that Mr. Heath clearly entered the realm of invention. (Rec. Page 134). That Court carefully considered all the prior art which is before this Court.

CHARACTERISTICS OF HOLLOW MASONRY WALLS.

The construction of hollow building walls of a load bearing character involves the consideration of many important requirements to attain economical and efficient manufacture of the blocks; ready and convenient assemblage of the blocks in the completed structure, the strength and stability of the wall produced.

The blocks must be so designed that they may be made with a minimum of waste by extruding clay through dies and cutting the column of the clay into

short sections, whereby quantity production is obtained. The blocks must be strong enough to prevent losses due to breaking of the green ware and to facilitate handling and stacking in the kilns. There should be a minimum numbers of shapes and forms of block to complete walls of various thicknesses.

Blocks should be so designed and proportioned that the workman can lay such blocks into walls with great rapidity and without special knowledge or skill.

Such a wall when finished should have a complete horizontal mortar bed for each course. The blocks in the wall should be as strong as this full width mortar bed to develop the full load bearing strength of the structure. Each course should be bonded with the next course above and below. All of the vertical webs and shells of the blocks should be in true vertical alignment with corresponding webs and shells in the courses above and below.

In the present invention, Mr. Heath has combined for the first time all these characteristics and has evolved a system of manufacture of the blocks and the construction of walls affording advantages not heretofore found in any hollow wall construction. In the Heath wall construction are provided alternating bonds transversely of the wall at every course. True vertical alignment of webs occur without special instruction of any character to the workmen; in fact, the usual habits of brick masonry produce this alignment in the Heath structure. The wall has continuous horizontal mortar beds between the courses throughout the thickness of the wall. All of the voids in the wall are sealed one from another, thereby securing more perfect insulation from heat and cold. It is proven by the record in this case that the Heath structure provides greater strength

for a given thickness of wall than any previous hollow wall construction, greater solidity due to the bonding and simplicity of the units and that unusual economies have been effected from the time the clay is extruded from the die in the form of these blocks until the blocks are laid up in the complete Heath wall.

HISTORY OF THIS INVENTION.

Mr. Heath is an eminent architect. In the course of his work he had made a study of various forms of hollow tile wall constructions and had specified and recommended the use of various hollow wall constructions including Denison patented hollow tile (one of the alleged anticipations). Mr. Heath knew the difficulties encountered in the manufacture and laying up of this Denison T-shaped tile. Appreciating the disadvantages of this and other load bearing tile made prior to his invention, to avoid these disadvantages formerly encountered, and to accomplish new advantageous results, he first devised a **three void block** (termed "double block") with a narrow intermediate void between two vertical webs and **of proportions not previously used anywhere**. However this gave him only one thickness of wall. At a later time while studying over the problem of increasing the thickness of the wall and retaining the horizontal mortar bed and alignment of webs and necessary bonds, he conceived the idea of combining with this three void block another block, a **single void block** of such size and proportion that when placed in position it would have its two vertical webs in vertical alignment with the corresponding webs of the double blocks, and have its upper and lower surfaces continue the horizontal mortar beds. He found that this formed the bases of a system

of wall construction having all the desired characteristics of the **ideal hollow wall**.

Mr. Heath then filed an application for a patent on his wall and after a rejection of the present claims of the patent by the Commissioner of Patents, he took an appeal to the Court of Appeals of the District of Columbia. Here for the first time both sides of the case were argued, with the blocks and actual wall constructions before a tribunal—counsel for the Government opposing the grant upon the same prior patents before this Court. The decision of that court ordered the Commissioner to issue the patent in suit. A certified copy of this decision has been made of record in this case (Rec. Page 131). Following the issuance of the patent, suit was filed by the plaintiff, seeking to enjoin the Columbia Brick Works, et al., at Portland, Oregon, for manufacturing a tile and causing walls to be built of an entirely different character from those manufactured by the appellees hereof. In that decision, (Rec. Page 135), Judge Bean of the District Court of Portland, dismissed the bill saying that the complainant was not entitled to the relief prayed for.

The Portland case was not appealed because infringement was not there proven. The defenses in the Portland case have been used by agreement in the present case and defendant here relies upon the defenses there set up.

DIFFERENCES BETWEEN THIS SUIT AND THE PORTLAND SUIT.

The memorandum decision of Judge Rudkin, (Rec. Page 140) the Court below in this case, quotes from Judge Bean's decision in the former suit under the Heath

patent and dismisses the bill because he feels that the two cases are practically identical. He says, very properly, decisions in patent cases where the same facts are involved should be as nearly harmonious as possible. He did not feel justified in disregarding Judge Bean's decision.

The Court below was mistaken in holding that the two cases were practically identical. The two cases are very different. In the former case, the defendant's structure was very different from the defendant's structure here. The structures proven to have been built by the defendants in the **Portland** suit did not even have vertical alignment of webs, which is so essential to the success of the present invention and so specifically called for by the patent. This may be seen at a glance by referring, for example, to defendant's exhibits, photographs Nos. 15 and 22. There each course had a large block of **three equal voids** and a small block of **two voids** one over the other and it could not be proven that these blocks were laid up with any but the outside webs in alignment.

The Patent at that time was much too young to make any material showing of commercial success. There was **nothing in the Portland case** to show the relative value of this invention compared with those of prior art.

In the present case we have a very extensive showing of commercial success not present in the Portland case. We have a construction manufactured by the defendants identical with that of the patent. We have a large number of witnesses including masons, contractors, eminent construction engineers, and manufacturers of clay products, all familiar with the tile industry, testifying as to the great advantages of the Heath wall construction. None of this was present in the Portland case.

The testimony of the Portland case has been stipulated into the present record and appears in abbreviated

narrative form in the transcript, pages 95 to 130. The balance of the record, similarly abbreviated, particularly pages 25 to 94 inclusive, constitutes new evidence in the present case of the very extensive commercial success and great value of the Heath invention. None of this was in the Portland case.

Therefore, Judge Rudkin was in error in holding that the records in the two cases were practically identical. They are indeed widely different. The only portions of the records in the two cases which are common are the defenses of the prior art patents (which were the same as those which were before the Patent Office), and oral statements of witnesses after having seen the Heath structure. Whereas in the present case we have twenty-six witnesses from different parts of the country, representing all branches of the art of hollow wall construction, testifying as to the great success, commercial value and pronounced advance which Mr. Heath has made in the art by this invention.

It is believed that perhaps Judge Rudkin on reading the defendant's brief in this case was misled by some of the inaccurate statements therein. For example, defendants' counsel stated that a large number of witnesses, naming them, testified that everything in the Heath patent was known in the art long before Mr. Heath obtained his patent. This is decidedly a misstatement. The only witness who even made a statement remotely corresponding to this was E. V. Johnson, who upon being handed the Heath patent said that "I don't see anything in that particular assemblage of blocks that was not a known factor to me both in practice and in theory." It is notable that neither Johnson nor any of the witnesses says he ever saw a wall like the Heath wall before Heath's invention. These other witnesses were each tes-

tifying as to some particular feature such as laying of tile horizontally or the vertical alignment of webs.

Counsel says in his brief that "the Johnson block was the same as the Heath block." This is not the case. Witnesses who knew the Johnson block said that it was **similar to one of the Heath blocks**. Johnson had only one block which could be similar to one of the Heath blocks. The Counsel states in his brief that the plaintiff, Heath, is the only witness testifying as to the patentability of his wall and that no one expert is asked "Is it invention or mechanical skill?" As a matter of fact a large number of witnesses in the present case are testifying for the plaintiff on this very subject as will be quoted later in this brief.

Counsel at the hearing objected to testimony (Rec. Page 37), "Why have you not licensed the great eastern states"? (Mr. Mack: "I object to that as immaterial." Court: "I will sustain the objection"), and then in his brief capitalizes the point, saying that Heath wall tile were manufactured only in three states, and compares it to the Johnson and Denison blocks which had been manufactured for years prior to the Heath invention.

It is notable that neither of the District Courts, in the two suits under this patent, declared the patent invalid. The first dismissed the bill without passing upon the point of validity, and the second—the court below—followed the other court, erroneously believing that the cases were identical.

DEFENSES.

The defense here sets up the same patents and alleged prior uses which were before the Patent Office, the Court of Appeals of the District of Columbia and the District Court at Portland. It is notable that

throughout all this contest not one single statement is made of any actual wall exactly or nearly like the Heath wall. **Not one single use of the thing of the Heath patent is even alleged.** The defendant is forced to rely upon oral statements of its prejudiced witnesses, that the Heath patent presents nothing new. They attempt to wave it easily aside, saying that it is the "obvious way" to do this thing. Yet, the defendant in the present case pays tribute to the invention by using the precise thing of the patent after attempts in the past to market other hollow load bearing wall tile. The defense in so speaking of the invention and in urging its great simplicity overlooks a long line of leading cases to the effect that:

Simplicity Emphasizes Merit of Invention.

"The combination is apparently very simple; but the simplicity of an invention so far from being an objection to it may constitute its great excellence and value."

(Justice Storey in **Ryan vs. Goodwin**, 3 Summer, 514).

Instead of detracting from the merits of this invention, the simplicity of the Heath wall construction emphasizes the fact that invention was required to make it.

In **Regent Manufacturing Company vs. Pennsylvania Electric**, 121 Fed. Rep. 80, the Court of Appeals of the Seventh Circuit in sustaining the patent for a mirror frame, all of the elements of which were old, says:

"The device seems exceedingly simple. But its very simplicity, in such an old field should be a warning against too ready acceptance of the ex post facto wisdom of the bystander."

The Johnson Defense.

Mr. E. V. Johnson of Chicago, in the **Portland** case was an antagonistic witness, called for the purpose of defeating this patent. He is a rival of Mr. Heath in business, and, with the Heath patent before him, testifies at great length as to the simplicity of the Heath wall. By stretches of imagination, in answer to hypothetical questions, he gives various answers to the effect that it is not an invention.

The Johnson deposition refers particularly to a block illustrated in his patent No. 837,572 issued December 4, 1906. (Def.'s Exhibit "Johnson Patent") That Johnson patent shows a block similar in contour to one of the blocks of the Heath wall, but of very heavy construction, it being designed to be set on end in wall structures. The Johnson patent teaches placing these blocks with the voids vertical. The blocks are comparatively short and the patent illustrates them arranged in a column construction. There is no assemblage of blocks illustrated in the patent nor alleged by Johnson corresponding to the Heath structure. There is nothing in his patent nor in his entire deposition even remotely suggesting the Heath wall, prior to Mr. Heath's invention.

Johnson testifies (Rec. Page 115) that it was "common practice" to lay tile horizontally or vertically but states that laid flat the blocks do not develop their full strength. He devotes considerable time to the reasons why the Johnson tile should be placed vertically in the wall.

The walls referred to in the Johnson deposition as having been built before Heath's invention, were either mere partition walls or walls built in accordance with the Johnson patent, (Rec. Page 116), in either case being one block thick. He says "I have uniformly recom-

mended the end section or vertical section system of construction." Rec. Page 117 indicates that he has carried out this principle since 1903 or 1904. He speaks of his catalogue (Def. Ex. Page 46 "National Fireproofing Co.'s Catalogue") showing vertical columns made of his blocks. (Rec. Page 118). He states (Rec. Page 119) that the hollows or voids run vertically and says (Rec., page 119) that a 12 inch wall would be laid the same as shown in his catalogue whether laid on the end or laid on the side.

Attention is directed to this exhibit. It shows a vertical column and to lay that column horizontally would not meet the claims of the Heath patent and would not provide the simple uniform construction of the Heath wall. He answers in response to a hypothetical question (Rec. Page 120), again drawing upon his imagination, that an ordinary bricklayer would lay one course and then "bust the tile in two" to complete the thickness of the wall. But, going on through his deposition, it is questionable whether even this imaginary wall as he has described it would have been a Heath wall or not.

At the time of Heath's invention, the Johnson block would not have suggested Heath's wall because Johnson's patent and his practice, teach vertical construction of walls where the blocks are each the full thickness of the wall, except for columns, where the grouping of the blocks is not adaptable to horizontal construction. Furthermore the Johnson block at that time was of such thick web and shell construction that it would not be convenient to break it. Even if told to break these heavy tile the mason would not, by any means, necessarily accomplish all the valuable features of the Heath patent. Johnson testifies under cross examination that he al-

ways recommends arranging these blocks vertically (Rec. Page 125). "I certainly should; if it was a load-carrying wall I would." **This patent is concerned only with load-carrying hollow walls.**

Where Johnson has built walls with horizontal construction, he states that such walls carry no weight and that the blocks usually have one dimension corresponding to the thickness of the wall (Rec. Page 124). Mr. Heath's wall must have two different blocks in each course.

Such testimony can not avail to defeat this patent for two reasons, first, it does not meet the construction called for by the claims, and second, as was said in the case of the **National Hollow B. B. vs. Interchangeable B. B. Company**, 106 Fed. Rep. 693, Court of Appeals, Eighth Circuit:

"Unsupported oral testimony of prior use is always open to suspicion and cannot prevail over the legal presumption of validity which accompanys the patent, unless it is sufficient to establish such a use beyond a reasonable doubt."

It is submitted with respect to the Johnson deposition, and other testimony, in the record, that if the Heath construction as shown in the patent were the natural ordinary method of construction, which any brick-layer could without instruction make,—surely, somewhere out of the liberal field of recollection of these many witnesses, the Defense could have at least prompted the mention of a wall which would have sounded like an anticipation.

It is notable that Mr. Johnson's large organizations in Chicago still follow the universal practice of end or vertical construction. His scheme of wall construction requires many forms (nineteen different shapes and sizes are shown in his catalogue) where the blocks are

each of the full width of the thickness of the wall. Out of Mr. Johnson's thirty-eight years of experience, he does not name a single wall embodying the features of the Heath patent, nor allege a construction which would anticipate its claims, but contents himself with waving his hand at this meritorious invention and saying (Rec. Page 124) "I don't see anything in that particular assemblage of blocks that was not a known factor to me both in practice and in theory." Even under cross-examination he fails to mention such an actual wall, his catalogue never illustrated such a wall, and he states with positiveness that he never recommended such a construction. The reason is that it never occurred to him to make such a wall. **Now that it is done, with the ex post facto wisdom of a bystander, he testifies in a manner which should fill the Court with gravest doubts as to the actuality of the walls he pictures.**

The Denison Defenses.

The Denison defense alleges invalidity of the patent because of the Denison patent reissue No. 13,299. The patentee of this patent and his son, George W. Denison, in business with him, are rivals of the appellant, manufacturing the Denison block, which the testimony shows is being supplanted by the Heath structure. As might be expected, they alleged no invention in the Heath wall. Of course this defense must be considered separately from the Johnson defense. The one can not be used to bolster up the weaknesses of the other, to defeat this patent in the suit. (**Dodge vs. Post**, 76 Fed. 807). The witnesses in the trial at Portland, and as quoted in the record here, were testifying both in depositions and in open court to independent and unallied practices which in no instance even purported to be a complete antici-

pation of the Heath Wall construction. One witness testifies it was common practice to lay hollow tile flat, another that it was common practice to make cross bonds, (which would apply to tile or brick) and another that it was common practice to produce alignment of webs as shown in the Denison patent.

The Supreme Court in the case of **The Barbed Wire Patent** (134 U. S. 75) in disposing of various alleged uses of barbs for wire fences, one use sworn to by 24 witnesses, another by a large number, and so on:

“The doctrine laid down by this court in **Coffin vs. Ogden**, 85 U. S. 18, Wall 120, 124, that ‘the burden of proof rests upon him’ the defendant, and ‘every reasonable doubt should be resolved against him.’ If the thing were embryotic or inchoate; if it rested in speculation or experiment; if the process pursued for its development had failed to reach the point of consummation, it cannot be offered to defeat a patent founded upon a discovery or invention which was completed, while in the other case there was only progress, however near that progress may have approximated the end in view.”

It has been well stated in **Dodge vs. Post**, 76 Fed. Rep. 807, at page 810:

“It is hardly necessary to say that each defense must be considered independently of all others and so considered must fail unless it be established by proof beyond a reasonable doubt.”

The Denison patent and the admitted Denison wall construction, show a system of making the body of the wall with a single T-shaped block, laid first one way and then reversed, resulting in three separate narrow mortar beds for each course. This requires the use of great care to secure vertical alignment of webs, it requires unusual uniformity of blocks. If they be irregular or warped in the making, however slightly, the

strength of the walls is impaired. The Denison wall requires special blocks of various shapes and sizes to start and finish a course, to close corners, pilasters and jambs, etc. We fail to see what possible application the Defense can properly make of this patent to anticipate the Heath patent. It has been urged as an anticipation because it is a hollow tile wall having an alignment of webs, and the Defense leaps the gap, between such a use and the Heath wall, by saying that to make the Heath wall, in view of the Denison patent requires no more than mechanical skill. The Denison patent had been practiced quite extensively for years before the Heath invention and without change. It is notable that it was to correct inherent faults and to improve and simplify the Denison construction, that Mr. Heath made his invention, a simplified economical wall construction.

We find in **Walker on Patents** a statement which applies well to the Denison defense and to the Johnson and others. (**Walker on Patents**, Sec. 26, P. 28):

“But it does not tend to prove want of invention to show that a skillful mechanic who has seen the patented thing can reconstruct some older thing so as to make it similar to that covered by the patent.”

Beach vs. Box Mfg. Co., 63 Fed. Rep. 601.

National Co. vs. Belcher, 71 Fed. Rep. 879.

In the Denison testimony we find unsupported oral statements of a wall evidenced by a sketch made by the witness, and relating to no particular wall construction. Even by this elastic method of securing evidence, after the Heath patent has been before the witness, we do not have an anticipation, because of the failure to show web alignment as called for by the Heath patent.

Denison and Johnson and the defense witnesses who testified in open court at Portland, were perhaps more justified because a much broader interpretation of the patent claims was there being urged to cover the very different structure of that defendant. Such testimony is not properly applied in the present case where the Court need only consider the patent in its narrowest interpretation, because the defendant is using the precise thing of the patent.

We draw from the testimony of the defense a tribute to the Heath invention. Examining the various alleged prior uses, which are not proven in any sense, and the admitted uses such as Denison and Johnson, we find that considerable effort is expended in making an unusual shaped tile, and special care and supervision of the workmen are necessary to get the vertical web alignment, or else the web alignment and strength of the walls is sacrificed. With the Heath patent before them, the witnesses, one testifying as to one particular feature and one as to another, all find as to their particular feature that the Heath wall embodies it in the most natural and effective manner.

Other Witnesses.

Various other witnesses of the defense, quoted from in defendant's brief below, need no reply except to call attention to the fact that each of these witnesses is testifying orally with the Heath wall construction before him, and with the ex post facto wisdom of the bystander, one says as to one feature that it is "common practice," another as to another feature that he has "seen it before," and another witness as to still another characteristic of the Heath wall that he has done "something like that for years." Witness Klose, (Rec. Page 97) qualifies his statement that he can see nothing new in the Heath

construction, by saying "unless he could make a tile which was absolutely select as to size," commenting that to select the tile as to size would be prohibitive. We may make reply to this most simply by calling attention to the record of the witnesses who are testifying as manufacturers of Heath tile, that they have without exception found it to be the most satisfactory wall construction.

Through all this strenuous effort to anticipate the Heath patent by these various witnesses called and prompted to that end, we find no evidence even remotely approximating that character of evidence required to defeat a patent. This Court in the case of **Los Alamitos Sugar Company vs. Carroll**, 173 Fed. Rep. 280 held:

"it is not sufficient to constitute an anticipation that the devices relied upon might, by a process of modification, reorganization or combination with each other be made to accomplish the function performed by the device of the patent."

Topliff vs. Topliff, 145 U. S. 156;

Gunn vs. Bridgeport Brass Co., (C. C.) 148 Fed. 239;

Ryan vs. Newark Co., (C. C.) 96 Fed. 100;

Simonds R. M. Co. vs. Hathorn Mfg. Co., (C. C.) 90 Fed. 201-208;

Gormully & J. Co. vs. Stanley Cycle Co., (C. C.) 90 Fed. 279;

Morrow vs. Shoemaker (C. C.) 59 Fed. 120.

This Court also held in the case of **Stebler vs. Riverside Heights Orange Growers' Assn.**, 205 Fed. Rep. 735:

"True, we may pick out one similarity in one of these defenses, and one in another, and still one in another, and by combining them all, anticipate the inventive idea expressed in the Strain patent, but the combination constituting the invention is not found in any one of them."

We submit that the present case is in strict parallelism with the case just quoted, and the following line of authorities:

Morton vs. Llewellyn, 164 Fed. 693, 90 C. C. A. 514;
Wilkins Shoe B. Co. vs. Webb (C. C.) 89 Fed. 982;
Krementz vs. Cottle Co., 148 U. S. 556, 13 Sup. Ct. 719, 37 L. Ed. 558;

Western Elec. Co. vs. Chicago Co., (C. C.) 14 Fed. 691;

Star Brass Co. vs. Gen. Elec. Co., 111 Fed. 398, 49 C. C. A. 409;

Union Biscuit Co. vs. Peters, 125 Fed. 601, 60 C. C. A. 337;

St. Louis Flushing M. Co. vs. American Co., 156 Fed. 574, 577, 84 C. C. A. 340.

It is accordingly held that the defense of anticipation is not sustained.

Patents in the Answer.

In the answer the defendant sets up several patents which need only be mentioned briefly. They have relied principally upon the Johnson and Denison prior patents. Judge Bean mentioned in his decision the Lovett patent. This mention is quoted in Judge Rudkin's decision. We need say nothing more concerning the Denison and Johnson patents.

In the Lovett patent each course consists of two single void blocks. The alignment of the webs is only at the outer tiers and in each course the smaller block has its web directly over and beneath the voids in the course below and above. The claims of the Heath patent can not be read upon this Lovett patent. Heath's patent claim calls for "horizontal courses each formed of blocks having a single void and other blocks having three

voids." The claim further calls for the central void of the three void block being in direct vertical alignment with the space between the blocks in adjacent courses.

The other patents may be disposed of briefly in the order named in the Answer.

The Bynum (No. 744,480) patent shows hollow tile laid horizontally, one block wide to each course, with no suggestion of alternating bond, and the construction is not capable of increasing the thickness of the wall and does not meet the Heath claims. The same thing applies to the Thomson patent (No. 222,211), which does not even have horizontal mortar beds required by the Heath claim. Fisher (No. 781, 431) is a very remote construction having no suggestion of vertical web alignment nor of three void and single void blocks. Yarnall (No. 695,594) shows a sewer pipe block having eight parallel longitudinal voids, not at all adapted for the Heath wall construction. Fisher (No. 817,478) has no suggestion of single void or three void blocks, nor vertical alignment of webs, called for by the Heath claims.

COMMERCIAL SUCCESS.

Where the validity of the patent is in doubt, the doubt should be resolved in favor of the patent upon a showing of commercial success. The record in the present case includes very extensive and enthusiastic testimony as to the unquestioned commercial success of Mr. Heath's invention. This we believe was overlooked by the Court below. In **Morton vs. Llewellyn**, (164 Fed. Rep. 693), this Court sustained the patent over a defense of invalidity for want of invention, in view of certain alleged prior uses, by favorably resolving the doubt upon a showing of commercial success, considerably less imposing than the proven success of the present invention. The plaintiff there testified that he had sold (apparently over a period of years) \$30,000 worth of fittings, and

that they had been used quite extensively, superceding the old style of double fittings, and that he was sending them to Portland, Victoria, San Francisco and San Jose. The Court said:

“We find no contradiction of this testimony in the record. Apart from the presumption of novelty that always attends the grant of a patent, the law is that where it is shown that a patented device has gone into general use, and has superseded prior devices having the same purpose, it is sufficient evidence of invention in a doubtful case.”

The Barbed Wire Patent, 143 U. S. 275, 292, 12 Sup. Ct. 443, 36 L. Ed. 154;

Keystone Manufacturing Company vs. Adams, 151 U. S. 139, 143, 14 Sup. Ct. 295, 38 L. Ed. 103;

Irwin vs. Hasselman, 97 Fed. 964, 38 C. C. A. 587;
Wilkins Shoe Button Company vs. Webb, (C. C.) 89 Fed. 982;

National Hollow B. B. Co. vs. Interchangeable B. B. Co., 106 Fed. 693, 707, 45 C. C. A. 544.

The testimony in the present case, not before the Portland Court, shows this invention is successful in various foreign countries as well as the United States, and that it has superseded largely or entirely other tile wall constructions. Frost testimony (Rec. Page. 73).

“A very large increase in the demand and production of Heath tile was effected during 1919 and 1920, which has very largely replaced both Denison tile and common brick. The former has not been manufactured in commercial quantities for the last six months or more.”

Mr. Frost is the President of the Los Angeles Pressed Brick Company and he further testifies that during a period of the first nine months of 1920, he had to decline a large amount of business in Heath hollow tile,

even though in that period his company manufactured sixteen thousand tons of Heath tile. (Rec. Page 74). This is the cubic equivalent of seven and one half million common brick. It is only fair to state that Mr. Frost is referring to the territory covered by his license agreement, when he mentions superseding the Denison tile. His concern formerly manufactured the Denison tile, and changed to the Heath construction because,—"of these tiles we considered the Heath tile the best from the manufacturers and builders standpoint." (Rec. Page 72).

Mr. Oudin, president of the Defendant Company, The American Fire Brick, testified he **changed from manufacturing Denison tile to the Heath wall tile.** (Rec. Page 28). He says "we investigated the **Heath tile and found it far superior to the Denison tile.**

Mr. Mathews, President of the Denny-Renton Clay & Coal Company of Seattle, testifies that after manufacturing hollow tile for load bearing walls, and after an "exhaustive investigation as to the merits of the Heath tile, in comparison with other hollow building tile, decided that for load bearing walls the Heath tile was superior to all others on the market." (Rec. Page 59). A plant superintendent of this same company, Mr. Cake testifies that they made the equivalent of approximately a quarter of a million double tile and the necessary singles the first six or eight months after they started.

Appellant has similar testimony by other witnesses in other parts of the country.

In San Francisco Mr. G. D. Clark, of N. Clark and Sons, says (Rec. Page 91):

"In the past ten years we have been in search of a hollow building tile, the pattern of which would be easy and economical to manufacture and at the same time meet every need in wall construction.

Several patented tile were presented for our consideration, among which were the Hercules, Hun, Denison and others, but in each instance their impracticability was manifest and in consequence abandoned. Within the last two years we learned of the Heath building tile and found that it possessed the requirements of a tile for which we had been searching, and we thereupon obtained exclusive right to manufacture and sell Heath tile in Northern California and the Hawaiian Islands.

This brings the case into complete conformity with cases decided by this Court for example, **Stebler vs. Riverside Heights**, *supra*, and **Bliss vs. Spengler**, 217 Fed. Rep. 394. In the latter case this Court said:

“It is manifestly not a contrivance that the ordinary mechanic would devise in the application of known elements. Otherwise, why was it not struck upon before?”

Other witnesses who speak of the commercial success and satisfactoriness of the Heath wall construction, found right here in San Francisco, are merely indicative of activity elsewhere. For example, Harry E. Drake, a masonry contractor, speaking of building various government buildings, says that they changed from ordinary hollow building tile to Heath tile because the army engineers considered the latter a better construction. Speaking of another building in Oakland he said Heath tile were given preference on account of load saving on concrete beams. He says:

“They have no difficulty in gaining alignment of webs in the use of the Heath tile, none whatever; that is taken care of in the design and arrangement of the tile.”

The witness Knudsen and others refer to photographic exhibits, of record, showing buildings having

walls of load bearing character, constructed of the Heath tile, in this vicinity.

Mr. Heath's invention is admittedly a narrow one but the fact that it has been used extensively in the United States and foreign countries, (Heath testimony Rec. Page 36 and 37) without change from the design of the inventor, and without advertising except for small pamphlets such as are introduced as exhibits, brings the circumstances of this case within the doctrine laid down by the Supreme Court in the **Minerals Separation L't'd. vs. Hyde**, 242 U. S. 261, at page 270. This Court had found explanation for the great success of that invention in an expenditure of \$60,000 to introduce the process in the United States, and at the time of the hearing before this Court it had not been introduced into the United States. In the present case, the advertising is very meager. The invention has been successful because of its merits alone. The Supreme Court in the case just mentioned cites some of its prior decisions as follows:

Diamond Rubber Co. vs. Consolidated Rubber Tire Co., 220 U. S. 428;

Carnegie Steel Co. vs. Cambria Iron Co., 185 U. S. 403, 429, 430;

Smith vs. Goodyear Dental Vulcanite Co., 93 U. S. 486.

PATENTABILITY OF HEATH INVENTION.

Is the Heath wall construction as disclosed in his patent, granted after a consideration of all of the prior art in the present case and before the Court at Portland an "invasion of the realm of invention," as termed by the Court of Appeals of the District of Columbia, or is it

mere mechanical skill? We hold that the record contains an abundance of proof that the Heath wall construction was something which mechanics, engineers and architects and building contractors had been striving for but had not accomplished.

To guide the Court in determining whether the Heath wall is invention or mechanical skill, we will quote from witnesses in various vocations in the manufacturing and building arts relating to wall constructions.

In the Portland case, various witnesses each testified that some part of the Heath wall was old to them, or was the natural way to lay hollow tile, but, may we again point out that not a single instance of such a wall is presented by the defendant in that case nor in the present case. In the present suit, a large number of witnesses, many of whom qualify as experts, some of whom have laid the tile with their own hands, and others of whom are architects, engineers and contractors, as well as manufacturers, say that they consider the Heath tile the "best wall construction" and that "it is an advance in the art of better masonry," and that "it is an invention."

Mr. Oudin, president of the American Fire Brick Co. defiantly admitted "We have investigated the Heath tile and found it far superior to the Denison tile for the reason that the Denison tile required for a 12 inch wall seven distinct pieces of tile, whereas the Heath tile required only three pieces. Other advantages were the rapidity of putting it into the wall on account of it being square and not of odd shapes, the way the Denison tile was." (Rec. Page 28). Mr. Oudin is a large manufacturer of clay products with many years' experience in the industry. It is striking that he accepts without

change the Heath construction after using other forms of wall tile. It never occurred to him, before the tile were brought to his attention, to make such a construction, yet he testifies that it is far superior to another tile which he paid for the privilege of manufacturing.

Mr. E. J. Mathews, president of the Denny-Renton Clay & Coal Company after comparing it favorably with other wall constructions, said:

“I consider the design of the Heath tile a meritorious invention, as it required that the fullest consideration be given, first, to the matter of reducing to the minimum the manufacturing difficulties and losses; and second, to producing a tile, which when laid in the wall, no matter how placed, would always have the webs in vertical alignment and thus develop the maximum load bearing capacity. These things could not have been accomplished by mere minor mechanical changes in the form of the hollow building blocks which have been in use for many years, nor could they have occurred accidentally nor in any way except by exhaustive study and planning.” (Rec. Page 60).

Mr. J. R. Gwynn, manager of N. Clark & Sons, San Francisco, licensed manufacturers of tile for Heath walls, says (Rec. Page 88):

“The tile are ingenious to say the least. Until Mr. Heath’s inventive genius was brought to bear, the building world had no such means of wall construction in hollow building tile. It has been regarded as an advance in the art of better masonry.”

Mr. E. Zimmerly, an eminent construction engineer, who after building many other forms of hollow walls including Denison and Johnson, asked if the design of the Heath system of wall construction were something any mechanic or engineer could do if called upon, says (Rec. Page 65):

“I think it is an invention. It required study in order to do that. It is all very easy to say after you have seen a thing, that anybody could do it.”

Mr. F. R. Boedecker, a contracting brick mason, after describing many advantages of the Heath wall not found in and other constructions states (Rec. Page 42) that he uses Heath Tile because he thinks “It is the best construction.” He makes a direct comparison (Rec. Page 43) as to advantages of Heath wall over Denison wall.

Mr. E. N. Dugan, whose occupation is that of an architect familiar with various forms of wall constructions including Denison, says (Rec. Page 50) he does not consider;—

“the design of the Heath wall within the development of the ordinary mechanic or architect, but the result of the discovery of principles which have been fully recognized and carefully worked out and developed into a system of construction heretofore unknown.”

Mr. James Fisher, agent for the Denny Renton Clay & Coal Company of Seattle, familiar with various forms of wall construction, after stating that he has a bigger demand for Heath than any other lines of wall construction, says (Rec. Page 54):

“it is giving entire satisfaction in this part of the country. It is considered a great improvement * * *.”

We refrain from burdening the Court with further quotations on this subject, but, twenty odd other witnesses heartily endorse, recommend, and without qualification, pay highest tribute to the Heath wall construction.

(No such testimony was produced in the Portland suit).

The only contradiction we find of the statements just quoted, throughout the record of the contest regarding this patent, is that various of Defendants' witnesses, after being shown the Heath patent say that they had laid other tile horizontally, that they had made similar bonds, and that it was the "natural way to do it." It is pertinent to again say that through all these presently prepared mental pictures drawn to defeat the patent, **not a single example of such a complete wall construction before Heath's invention, is named**, much less proven by that character of evidence, clear and convincing beyond a reasonable doubt, such as is required to invalidate a patent.

SUMMARY OF EVIDENCE.

Considering both sides of this suit, on one hand it is an invention, a composite wall construction, which after contested consideration, was found by the unanimous opinion of the Court of Appeals of the District of Columbia to be patentable over the exact forms of prior single tile and wall constructions which are before this Court.

This invention was developed to fill an existing want. It was evolved, simplified and completed and put into practice and accepted largely and successfully used by manufacturers, building engineers and architects.

It is admitted to be exceedingly simple, which we hold constitutes its great excellence and value. It is this very simplicity which has made it such a great success. **The principal defendant in this case had ceased to manufacture one of the principal forms of wall construction alleged as an anticipation of this invention to become a licensee under the patent in suit.** In various parts of the country we find this wall construction not only suc-

cessful but actually superseding other forms of hollow tile construction.

We have on the other hand, statements, made in self interest that this patented wall involves no invention because they have laid hollow tile on the sides, they have made bonds, or that the Johnson tile could be laid on the side. But, as against this, we find Johnson himself, out of nearly forty years of experience stating that he would recommend placing his tile on end, and we find his great company manufacturing many different forms of tile to be placed in vertical position in walls, each tile to be the whole thickness of the wall. The nearest similarity, even to some of the features of the Heath wall construction, is found in his column construction illustrated in Johnson's Patent and Catalogue.

It is admitted that some characteristics of the Heath wall follow former practices of masonry. This very fact promotes its ready adoption.

The bonding at every course, is found in one form of brick work and is as old as the use of bricks. The horizontal mortar beds is also a feature used in brick work. The laying of brick horizontally and vertically is admitted to be common practice within the discretion of the mechanic. But it is the completed wall, the system of construction, the **tout ensemble** of the Heath invention which results in a wall of great simplicity; economies from the time the clay leaves the dies until the wall is completed; high degree of load-bearing characteristics; rapidity with which the wall may be built; great simplicity with which offsets, corners and jambs can be fitted into the uniform courses; universal and continuous automatically resulting vertical alignment of load-bearing webs; the complete closing of the voids in each course from adjacent voids, providing the highest

possible degree of insulation. All of these combine to make up the Heath wall construction.

In **Dubois vs. Kirk**, 158 U. S. 58, the Supreme Court sustained the following claim:

“A bear-trap dam having a releasing or open sluice extending from under the gates so as to relieve them from unnecessary pressure, substantially as and for the purpose described.”

Bear-trap dams were admitted to be old. Sluices or waterways were a common and well-known method of relieving pressure on other dams. The Supreme Court, in passing on the patent, said:

“The **Kirk** invention is undoubtedly a very simple one, and it may seem strange that a similar method of relieving the pressure had never occurred to the builders of bear-trap dams before; but the fact is that it did not, and that it was not one of those obvious improvements upon what had gone before which would suggest itself to an ordinary workman or fall within the definition of mere mechanical skill. It was in fact the application of an old device to meet a novel exigency and subserve a new purpose.”

In case **Krementz vs. Cottle**, 148 U. S. 556, the Supreme Court said:

“It is not easy to draw a line that separates the ordinary skill of a mechanic, versed in his art, from the exercise of patentable invention, and the difficulty is especially great in the mechanic arts, where the successive steps in improvements are numerous and where the changes and modifications are introduced by practical mechanics.”

In this case the simplified, single piece collar button, however, was held to have obvious advantages over previous devices of the kind. There circumstances were

analogous to those in the present case, as the record shows that it was common practice to do almost the thing of the invention in one case, and in one another, but the Court, citing **Webster-Loom Company vs. Higgins**, 105 U. S. 580, **Topliff vs. Topliff**, 145 U. S. 156, and others, said:

“Now that it has succeeded, it may seem very plain to anyone that he could have done as well. This is often the case with inventions of the greatest merit.”

The Court of Appeals in the Seventh Circuit said in the case of **Faries Mfg. Company vs. George W. Brown & Company**, 121 Fed. Rep. 547:

“The eye that sees a thing already embodied in mechanical form gives little credit to the eye that first saw it in imagination. But the difference is just the difference between what is common observation and what constitutes an act of creation. The one is the eye of the inventive genius, the other a looker-on, after the fact.

All through the decisions of the Courts runs the theme that the inventor who has supplied a want by a simple, happy thought, is a greater public benefactor than the one who has contrived a complex means for accomplishing the object. And while the simplicity of the Heath wall may be seized upon by this defendant as a ground for declaring against its patentability, the Court will consider it as evidence of inventive genius.

CONCLUSION.

We submit in conclusion, that the decision of the Court of Appeals in the District of Columbia holding that the invention is a patentable one, is supported and reinforced not only by the decisions here cited, but by the record of the case before the District Court of Port-

land, Oregon, and the extensive showing of success before this Court.

There is not a single instance of anything new having been produced by the defendant, in the prior case nor here, which was not before the Court of Appeals of the District of Columbia, except unsupported oral testimony of those who have first seen the Heath wall alleging, one as to one feature, and another as to another, that some particular characteristic of the Heath wall is the natural and obvious way of accomplishing such a result. We submit that the Court of Appeals was right in saying: (Rec. Page 133). "In this device alone are the webs and voids of equal thickness and in perfect vertical alignment, thus forming a uniform series of voids extending horizontally throughout the entire length of the wall, and a perfectly aligned series of vertical webs, thereby securing a maximum amount of strength for a minimum of weight."

To this might be added that in this structure alone are the courses of uniform vertical depth, providing a horizontal mortar bed throughout the thickness of the wall, and in none of the references is found similar characteristics combining alternate overlapping or bonding of each course with that of the adjacent course, while still maintaining its desirable vertical alignment of webs, mortar joints and beds.

In this connection it is important to remember that the Heath patent covers a wall and not a tile or some part of a wall.

The testimony of the President of the Defendant Company in this case admits greater economy of manufacture, namely, by the use of a single die, and completing the wall with the greatest simplicity, which fits the statement of the Court of Appeals D. C. that

“the art is a narrow one, and any step which marks so decided an advance in strength, utility and economy of construction as that here disclosed, is entitled to recognition and protection. Not only does no reference cited anticipate appellant’s claims, but no combination of the references can be devised which will accomplish this end. It is no answer that the construction of walls from hollow blocks is old in the art. A new combination of old elements amounts to invention where it produces a new and useful result, although each old element may have been suggestive of the use which could be made of it in the new.

Steiner & Voegtly Hardware Company vs. Tabor Sash Company, 178 Fed. 831, (C. C. A. 2nd Cir). (Rec. Page 133-134).”

Even if it were doubtful as said in the last paragraph of that decision the Court says: “In the absence of proof to support the conclusion that it was obvious mechanical skill, the doubt should be resolved in favor of the appellant.” (Heath).

Here, it is submitted, there is extensive and cumulative evidence that it is not within the realm of mechanical skill. The assiduous efforts of the defendants in the former case at Portland, and in the case here, out of the years of experience of such witnesses as Denison and Johnson, fail to prove or even point out a single wall of this character prior to Heath’s invention.

If the conception of the Heath wall were so simple, were in the province of the ordinary mechanic, “**why then was it not struck upon before?**” The answer is very obvious. **Heath’s conception did involve real invention.** The Court of Appeals of the District of Columbia, considering the very art before this Court, has so held. We respectfully submit that the record in this present case strongly fortifies the legal presumption of

validity accompanying the granting of this patent, by the proven success and the welcome given it by "the big workaday world outside," and particularly by those who have been striving for years for just such an ideal wall.

We are not here seeking to interfere with the manufacture of any of these alleged prior uses, all these prior things may be practiced undisturbed so far as Heath's patent is concerned. We seek only to sustain this patent as covering the identical thing, the particular step forward which Mr. Heath has made in the building art.

After generations of use of more complicated methods of accomplishing the general results of a strong hollow wall construction, Mr. Heath has taken the last step which the Supreme Court has said in the law of patents is the step that wins. He has given the world something it had not had before. He is entitled to that reward which the laws provide and for which the constitution authorizes the granting of patents to promote the progress of science and useful arts.

Respectfully submitted,

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